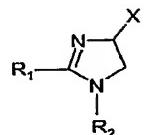


## **CLAIMS**

## 1. Compounds of the general formula (I)

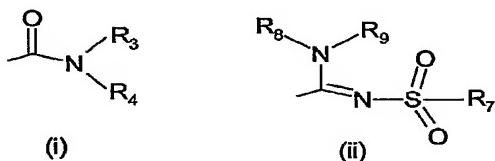


5 (1)

**wherein:**

- 10

  - R<sub>1</sub> and R<sub>2</sub> independently represent phenyl, thienyl or pyridyl which groups may be substituted with 1, 2 or 3 substituents Y, which can be the same or different, from the group branched or linear C<sub>1-3</sub>-alkyl or C<sub>1-3</sub>-alkoxy, phenyl, hydroxy, chloro, bromo, fluoro, iodo, trifluoromethyl, trifluoromethylthio, trifluoromethoxy, carboxyl, trifluoromethylsulfonyl, cyano, carbamoyl, sulfamoyl and acetyl, or R<sub>1</sub> and/or R<sub>2</sub> represent naphtyl,
  - X represents one of the subgroups (i) or (ii),



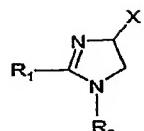
**wherein:**

- R<sub>3</sub> represents a hydrogen atom or a branched or linear C<sub>1-3</sub> alkyl group,  
- R<sub>4</sub> represents a branched or linear C<sub>1-8</sub> alkyl or C<sub>3-8</sub>-cycloalkyl-C<sub>1-2</sub>-alkyl group,  
branched or linear C<sub>1-8</sub> alkoxy, C<sub>3-8</sub> cycloalkyl, C<sub>5-10</sub> bicycloalkyl, C<sub>6-10</sub> tricycloalkyl,  
which groups may contain one or more heteroatoms from the group (O, N, S) and  
which groups may be substituted with a hydroxy group, 1-3 methyl groups, an  
ethyl group or 1-3 fluoro atoms, or R<sub>4</sub> represents a phenoxy, benzyl, phenethyl or  
phenylpropyl group, optionally substituted on their phenyl ring with 1-3  
substituents Y, wherein Y has the abovementioned meaning, or R<sub>4</sub> represents a  
pyridyl or thienyl group, or R<sub>4</sub> represents a group NR<sub>5</sub>R<sub>6</sub> wherein  
R<sub>5</sub> and R<sub>6</sub> - together with the nitrogen atom to which they are attached -form a  
saturated or unsaturated, monocyclic or bicyclic, heterocyclic group having 4 to  
10 ring atoms, which heterocyclic group contains one or two heteroatoms from

the group (O, N, S) and which heterocyclic group may be substituted with a branched or linear C<sub>1-3</sub> alkyl, phenyl, hydroxy or trifluoromethyl group or a fluoro atom, or

- 5 R<sub>3</sub> and R<sub>4</sub> – together with the nitrogen atom to which they are attached - form a saturated or unsaturated, monocyclic or bicyclic, heterocyclic group having 4 to 10 ring atoms, which heterocyclic group contains one or two heteroatoms from the group (O, N, S) and which heterocyclic group may be substituted with a branched or linear C<sub>1-3</sub> alkyl, phenyl, amino, hydroxy or trifluoromethyl group or a fluoro atom,
- 10 – R<sub>7</sub> represents a benzyl, phenyl, thienyl or pyridyl group, which groups may be substituted on their aromatic ring with 1, 2, 3 or 4 substituents Y, wherein Y has the meaning as indicated above, which can be the same or different, or R<sub>7</sub> represents C<sub>1-8</sub> branched or linear alkyl, C<sub>3-8</sub> alkenyl, C<sub>3-10</sub> cycloalkyl, C<sub>5-10</sub> bicycloalkyl, C<sub>6-10</sub> tricycloalkyl or C<sub>5-8</sub> cycloalkenyl or R<sub>7</sub> represents naphthyl or R<sub>7</sub> represents a amino group or R<sub>7</sub> represents a C<sub>1-8</sub> dialkylamino group, a C<sub>1-8</sub> monoalkylamino group or a saturated or unsaturated, monocyclic or bicyclic, heterocyclic group having 4 to 10 ring atoms, which heterocyclic group contains 1 or 2 nitrogen atoms and which heterocyclic group may contain 1 heteroatom from the group (O, S) and which heterocyclic group may be substituted with a branched or linear C<sub>1-3</sub> alkyl, phenyl, hydroxy or trifluoromethyl group or a fluoro atom,
- 15 – R<sub>8</sub> represent a hydrogen atom or a methyl group,
- R<sub>9</sub> represents a hydrogen atom or a methyl, ethyl or methoxy group,
- 20
- 25 and tautomers, stereoisomers, prodrugs and salts thereof

## 2. Compounds of the general formula (I)



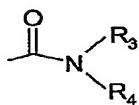
10

wherein:

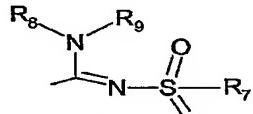
5

- R<sub>1</sub> and R<sub>2</sub> independently represent phenyl, which phenyl group may be substituted with 1, 2 or 3 substituents Y, which can be the same or different, from the group branched or linear C<sub>1-3</sub>-alkyl or C<sub>1-3</sub>-alkoxy, phenyl, hydroxy, chloro, bromo, fluoro, iodo, trifluoromethyl, trifluoromethylthio, trifluoromethoxy, carboxyl, trifluoromethylsulfonyl, cyano, carbamoyl, sulfamoyl and acetyl, or R<sub>1</sub> and/or R<sub>2</sub> represent naphtyl, thienyl or pyridyl,
  - X represents one of the subgroups (i) or (ii),

15



(i)



(ii)

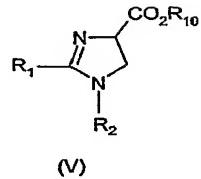
wherein:

- 20 - R<sub>3</sub> represents a hydrogen atom,  
- R<sub>4</sub> represents a branched or linear C<sub>1-8</sub> alkyl, branched or linear C<sub>1-8</sub> alkoxy or C<sub>3-8</sub> cycloalkyl group, which groups may be substituted with a hydroxy group, 1-3 methyl groups, an ethyl group or 1-3 fluoro atoms, or R<sub>4</sub> represents a phenoxy, pyridyl or thienyl group, or R<sub>4</sub> represents a group NR<sub>5</sub>R<sub>6</sub> wherein R<sub>5</sub> and R<sub>6</sub> - together with the nitrogen atom to which they are attached - form a saturated or unsaturated, monocyclic or bicyclic, heterocyclic group having 4 to 10 ring atoms, which heterocyclic group contains one or two heteroatoms from the group (O, N, S) or  
R<sub>3</sub> and R<sub>4</sub> – together with the nitrogen atom to which they are attached - form a saturated or unsaturated, monocyclic or bicyclic, heterocyclic group having 4 to 10 ring atoms, which heterocyclic group contains one or two heteroatoms from the group (O, N, S) or

25  
30

- the group (O, N, S) and which heterocyclic group may be substituted with a methyl, hydroxy or trifluoromethyl group or a fluoro atom,
- R<sub>7</sub> represents a phenyl group, which phenyl group may be substituted on its aromatic ring with 1, 2, 3 or 4 substituents Y, wherein Y has the meaning as indicated above, which can be the same or different, or R<sub>7</sub> represents C<sub>1-8</sub> branched or linear alkyl, C<sub>3-10</sub> cycloalkyl or C<sub>5-10</sub> bicycloalkyl, or R<sub>7</sub> represents naphtyl or R<sub>7</sub> represents a amino group or R<sub>7</sub> represents a C<sub>1-8</sub> dialkylamino group, a C<sub>1-8</sub> monoalkylamino group or a saturated or unsaturated, monocyclic or bicyclic, heterocyclic group having 4 to 10 ring atoms, which heterocyclic group contains 1 or 2 nitrogen atoms and which heterocyclic group may contain 1 heteroatom from the group (O, S) and which heterocyclic group may be substituted with a branched or linear C<sub>1-3</sub> alkyl or hydroxy group,
  - R<sub>8</sub> represent a hydrogen atom,
  - R<sub>9</sub> represents a hydrogen atom
- and tautomers, stereoisomers, prodrugs and salts thereof.
3. Pharmaceutical compositions comprising, in addition to a pharmaceutically acceptable carrier and/or at least one pharmaceutically acceptable auxiliary substance, a pharmacologically active amount of at least one compound of one of the claims 1-2, or a salt thereof, as an active ingredient.
4. A compound as claimed in claim 1 or claim 2, or a salt thereof, for use in medicine
5. Compounds of the general formula (IV)
- (IV)
- wherein R<sub>1</sub> and R<sub>2</sub> have the meanings given in claim 1, such compounds being useful in the synthesis of compounds of the general formula (I).

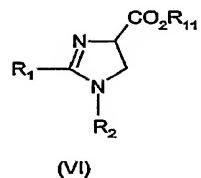
## 6. Compounds of the general formula (V)



5       wherein R<sub>1</sub> and R<sub>2</sub> have the meanings given in claim 1 and R<sub>10</sub> represents a branched or linear C<sub>1-5</sub> alkyl group or a benzyl group, such compounds being useful in the synthesis of compounds of the general formula (I).

## 7. Compounds of the general formula (VI)

10



15       wherein R<sub>1</sub> and R<sub>2</sub> have the meanings given in claim 1 and R<sub>11</sub> represents H or an earth alkali metal, such compounds being useful in the synthesis of compounds of the general formula (I).

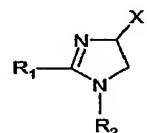
20       8. Use of a compound as claimed in claim 1 or claim 2 for the preparation of a pharmaceutical composition for the treatment of psychosis, anxiety, depression, attention deficits, memory disorders, cognitive disorders, appetite disorders, obesity, in particular juvenile obesity and drug induced obesity, addiction, impulse control disorders, appetite, drug dependence and neurological disorders such as neurodegenerative disorders, dementia, dystonia, muscle spasticity, tremor, epilepsy, multiple sclerosis, traumatic brain injury, stroke, Parkinson's disease, Alzheimer's disease, epilepsy, Huntington's disease, Tourette's syndrome, cerebral ischaemia, cerebral apoplexy, craniocerebral trauma, stroke, spinal cord injury, neuroinflammatory disorders, plaque sclerosis, viral encephalitis, demyelinisation related disorders, as well as for the treatment of pain disorders, including neuropathic pain disorders, and other diseases involving cannabinoid neurotransmission, including the treatment of septic shock, glaucoma, cancer, diabetes, emesis, nausea, asthma, respiratory diseases, gastrointestinal

25

30

disorders, gastric ulcers, diarrhoea, cardiovascular disorders, atherosclerosis, liver cirrhosis and sexual disorders.

9. A method of treating psychosis, anxiety, depression, attention deficits, memory  
 5 disorders, cognitive disorders, appetite disorders, obesity, addiction, impulse control disorders, drug dependence and neurological disorders such as dementia, dystonia, muscle spasticity, tremor, epilepsy, multiple sclerosis, traumatic brain injury, stroke, Parkinson's disease, Alzheimer's disease, epilepsy, Huntington's disease, Tourette's syndrome, cerebral ischaemia, cerebral apoplexy, craniocerebral trauma as well as for the treatment of neuropathic pain disorders and other diseases involving cannabinoid neurotransmission, including glaucoma, cancer, emesis, nausea, asthma, respiratory diseases, gastrointestinal disorders, gastric ulcers, diarrhoea, cardiovascular disorders, atherosclerosis, liver cirrhosis and sexual disorders,  
 10  
 15 characterized in that a compound of formula (I) is used

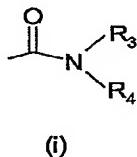


(I)

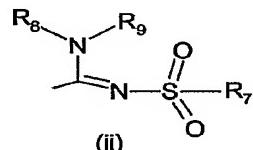
wherein:

20

- R<sub>1</sub> and R<sub>2</sub> independently represent phenyl, thienyl or pyridyl which groups may be substituted with 1, 2 or 3 substituents Y, which can be the same or different, from the group C<sub>1-3</sub>-alkyl or C<sub>1-3</sub>-alkoxy, phenyl, hydroxy, chloro, bromo, fluoro, iodo, trifluoromethyl, trifluoromethylthio, trifluoromethoxy, methylsulfonyl, carboxyl, trifluoromethylsulfonyl, cyano, carbamoyl, sulfamoyl and acetyl, or R<sub>1</sub> and/or R<sub>2</sub> represent naphtyl,
- X represents one of the subgroups (i) or (ii),



(i)



(ii)

25

wherein

- R<sub>3</sub> represents a hydrogen atom or a branched or linear C<sub>1-3</sub> alkyl group,
- R<sub>4</sub> represents a branched or linear C<sub>1-8</sub> alkyl or C<sub>3-8</sub>-cycloalkyl-C<sub>1-2</sub>-alkyl group, branched or linear C<sub>1-8</sub> alkoxy, C<sub>3-8</sub> cycloalkyl, C<sub>5-10</sub> bicycloalkyl, C<sub>6-10</sub> tricycloalkyl, which groups may contain one or more heteroatoms from the group (O, N, S) and which groups may be substituted with a hydroxy group, 1-3 methyl groups, an ethyl group or 1-3 fluoro atoms, or R<sub>4</sub> represents a phenyl, phenoxy, benzyl, phenethyl or phenylpropyl group, optionally substituted on their phenyl ring with 1-3 substituents Y, wherein Y has the abovementioned meaning, or R<sub>4</sub> represents a pyridyl or thienyl group, or R<sub>4</sub> represents a group NR<sub>5</sub>R<sub>6</sub> wherein 5 R<sub>5</sub> and R<sub>6</sub> - together with the nitrogen atom to which they are attached -form a saturated or unsaturated, monocyclic or bicyclic, heterocyclic group having 4 to 10 ring atoms, which heterocyclic group contains one or more heteroatoms from the group (O, N, S) and which heterocyclic group may be substituted with a branched or linear C<sub>1-3</sub> alkyl, phenyl, hydroxy or trifluoromethyl group or a fluoro 10 atom, or 15 R<sub>3</sub> and R<sub>4</sub> – together with the nitrogen atom to which they are attached - form a saturated or unsaturated, monocyclic or bicyclic, heterocyclic group having 4 to 10 ring atoms, which heterocyclic group contains one or more heteroatoms from the group (O, N, S) and which heterocyclic group may be substituted with a branched or linear C<sub>1-3</sub> alkyl, phenyl, amino, hydroxy or trifluoromethyl group or a fluoro 20 atom,
  - R<sub>7</sub> represents a benzyl, phenyl, thienyl or pyridyl group, which groups may be substituted on their aromatic ring with 1, 2, 3 or 4 substituents Y, wherein Y has the meaning as indicated above, which can be the same or different, or R<sub>7</sub> represents C<sub>1-8</sub> branched or linear alkyl, C<sub>3-8</sub> alkenyl, C<sub>3-10</sub> cycloalkyl, C<sub>5-10</sub> bicycloalkyl, C<sub>6-10</sub> tricycloalkyl or C<sub>5-8</sub> cycloalkenyl or R<sub>7</sub> represents naphtyl or R<sub>7</sub> represents a amino group or R<sub>7</sub> represents a C<sub>1-8</sub> dialkylamino group, a C<sub>1-8</sub> monoalkylamino group or a saturated or unsaturated, monocyclic or bicyclic, heterocyclic group having 4 to 10 ring atoms, which heterocyclic group contains 1 25 or 2 nitrogen atoms and which heterocyclic group may contain 1 heteroatom from the group (O, S) and which heterocyclic group may be substituted with a branched or linear C<sub>1-3</sub> alkyl, phenyl, hydroxy or trifluoromethyl group or a fluoro atom,
  - R<sub>8</sub> represent a hydrogen atom or a methyl group,
  - R<sub>9</sub> represents a hydrogen atom or a methyl, ethyl or methoxy group,

and tautomers, stereoisomers, prodrugs and salts thereof.

10. Use as claimed in claim 8 characterized in that said disorders are eating disorders, in particular obesity, juvenile obesity and drug induced obesity.
- 5    11. Use of a compound as claimed in claim 1 or claim 2 for the preparation of a pharmaceutical composition for the treatment of eating disorders, in particular obesity, juvenile obesity and drug induced obesity, characterized in that said pharmaceutical composition also contains at least one lipase inhibitor.
- 10    12. Use as claimed in claim 11, characterized in that said lipase inhibitor is orlistat or lipstatin.